

To Gain Competitive Advantage, LEARN YOUR ABCDs



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Understanding and staying engaged with patients throughout their treatment and wellness journey is a primary focus of the entire life sciences industry. The benefits are clear:

- Patients' trust in the therapy and its ecosystem grows
- Longitudinal data on patient progress provides evidence for value-based contracts
- Pharma manufacturers gain "stickiness" with patients and the healthcare system
- Companies increase competitive advantage through differentiation rather than price

But competition is no longer limited to the pharmaceutical company down the street. It may come from born-digital and consumer-focused companies such as Amazon, Apple,

Google, or CVS Health that are experts at applying technology to the buyer journey. As acronyms for the technology enablers of competitive differentiation move from **SMAC** - social, mobile, analytics and cloud - to **ABCD** - AI, blockchain, cloud, and digital - it's time for pharma companies to speak the language.

AI is the acronym being spoken most frequently, from the server room to the board room.

AI is poised to improve outcomes across the industry; yet today, each application of AI is narrow in nature and attempts to solve a very specific problem, such as recognizing cancer in images or performing routine activities in a patient contact center.

Machine learning (ML) is a branch of AI seeing increased adoption across the life sciences value chain.

In ML, computers ingest huge data sets and apply statistical learning techniques to identify patterns and help humans make accurate predictions. Algorithms, which are programs with a sequence of instructions, are created by government agencies and companies to address specific needs, ranging from ranking the risk of bird species carrying Asian H5N1 virus, to bladder treatment recommendations, to sentiment analysis during phone conversations and chat sessions.

AI adoption is catching up with its hype.

Successful companies must put the following dimensions in place to differentiate themselves and create sustainable competitive advantage:

1. A vision and roadmap for AI
2. Strong executive sponsorship
3. Access to bias-free data
4. Investments in computing power and algorithms
5. Tolerance to accept certain errors levels by machines
6. Early engagement of Security, Privacy, Ethics and HR teams

Every day, established high-tech consumer giants and new nimble born-digital companies are collecting vast amounts of real-world data, perfecting their algorithms, predicting the patient journey more precisely, and increasing their strategic advantage. Pharma, there's no time to wait to learn your ABCDs. ●

AI can be used to speed up marketing content delivery and improve content monitoring, but in the long term, AI should take on a greater role in helping with messaging and content creation. "Imagine how much easier it will be for marketers and copywriters to create innovative pieces if they have basic compliant content to build off of," he says. "Faster creation and faster review mean life-saving drugs get to market faster at reduced costs for everyone."

Mr. Burke adds that in the sales realm, AI can be useful for analyzing the landscape and helping sales leaders decide where to put their reps and what type of content would be most impactful in a given area. Currently, answering those questions requires human analytics.

Even though the industry has billions of points of data it collects on its own, companies still need to use third-party vendors to acquire more data because even the largest organizations don't have all the datasets that they need, says Ariel Katz, co-founder of H1, a live data insights company. These companies need more data, they need a way to make it functional, and they need to use external sources for that data. This requires an AI platform to structure that data into some sort of algorithm.

"The industry is at a point where pharma companies realize that they need to adopt these new technologies, and then implement algorithms and see the changes in terms of workflow," Mr. Katz says. "The impact will be across every function — basic research, preclinical, clinical, medical affairs, commercial, regulatory — and every activity."

AI can determine the right indication to help get to market quicker, especially as many companies are gearing toward technology platforms instead of positioning themselves as small molecule-based companies. "There are algorithms that can be run to help accelerate the strategy component to get drugs to market more quickly when the right decisions are made upfront," Mr. Katz says.

AI Reveals Insights

By leveraging real-world data and AI/ML, life-sciences companies can uncover precise insights. Such insights enable companies to find new opportunities in established approaches, identify new means for competitive differentiation and advantage, and innovatively, quickly, and confidently pivot to address business challenges. "New insights can also be used to create tailored, competitive, and sustainable strategies that impact every stage of the commercial continuum, including prelaunch, launch, maturity, and loss of exclusivity," Mr. Resnick says. "By infusing brand strategies with AI/ML, brand managers extract the greatest optimized value from each stage of a brand's lifecycle."

AI and machine learning help unlock the power of digital, genomic, and other clinically rich data sources to enable real-time insights and agile response capabilities. AI/ML significantly enhance precision customer engagement approaches, while at the same time, enabling brand teams to execute new strategies with agility, speed, and efficiency.

For example, Mr. Resnick says, a prelaunch brand team could leverage AI/ML to examine patient level data to more deeply understand patient segments and disease progression. At launch, AI/ML can be used to precisely segment and target physicians in order to craft and optimize salesforce strategies.

A mature brand might re-examine its own — and its competitors — multichannel marketing (MCM) promotional strategies to more effectively engage physicians with the right message, channel, and timing. At loss of exclusivity, AI/ML might enable a brand to tap into new revenue streams by examining patient data to uncover